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Remarks

Claims 15-20 are pending in the application. Claims 15-20 stand rejected. Claims 1-14 and 21-29 have been canceled.

In accordance with 37 C.F.R. 1.136(a), a three month extension of time is submitted herewith to extend the due date of the response to the Office Action dated July 14, 2005, for the above-identified patent application from October 14, 2005, through and including January 14, 2006. Due to the holiday, Applicants have through and including January 17, 2006 to file this response. In accordance with 37 C.F.R. 1.17(a)(3), authorization to charge a deposit account in the amount of \$510.00 to cover this extension of time request also is submitted herewith.

The rejection of Claims 15, 16, and 17 under 35 U.S.C. § 103(a) as being unpatentable over Gambale et al. (U.S. Patent No. 5,144,959) is respectfully traversed.

Gambale et al. describes a guidewire catheter with varying radiopacity at its distal end. Figure 6 illustrates an embodiment in which the guidewire has a distal tip 62 that is highly radiopaque, a single intermediate segment 64 that is non-radiopaque and a single proximal segment 66 that is moderately radiopaque. The highly radiopaque distal segment 62 provides clear, visible fluoroscopic indication of the distal tip of the guidewire to indicate clearly the guidewire position. Gambale et al. explains that "[t]he intermediate, non-radiopaque segment 64 is intended to be disposed so that the region of the artery in which the stenosis is located will be completely unobstructed by any radiopaque effects of the guidewire so that the full radiopaque effect of the radiopaque contrast liquid injected into the artery can be visualized on the fluoroscope, particularly in the critical region of the stenosis." Col. 5, lines 6-13. Accordingly, it is respectfully submitted that Gambale et al. does not disclose nor suggest exposing the core wire beneath the mask at a plurality of predetermined locations.

Claim 15 has been amended to recite a "method for manufacturing a guidewire suitable for measuring features within a vessel, the method comprising: providing a core wire having a proximal section and a distal section, the distal section at least partially defining a distal outer surface of the guidewire; ... and

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removing the mask to provide a plurality of equally spaced radiopaque markers on the distal section.”

Gambale et al. does not describe nor suggest a distal section of the core wire at least partially defining a distal outer surface of the guidewire, as required by Applicants’ claimed invention. Rather, Gambale et al. describes a guidewire having a shaft and an outer helical coil attached to the distal region of the shaft and extending distally beyond the distal end of the shaft. Further, as discussed above, Gambale et al. does not describe or suggest a plurality of equally spaced radiopaque markers on the distal section of the core wire, as required by Applicants’ claimed invention. Accordingly, for the reasons set forth above, Applicants submit that Claim 15 is patentable over Gambale et al.

Claims 16 and 17 depend from independent Claim 15. When the recitations of Claims 16 and 17 are considered in combination with the recitations of Claim 15, Applicants submit that dependent Claims 16 and 17 likewise are patentable over Gambale et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103(a) rejection of Claims 15-17 is overcome and should be withdrawn.

The rejection of Claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Gambale et al. in view of Schwartz et al. (U.S. Patent No. 5,437,288) is respectfully traversed.

Gambale et al. is described above. Schwartz et al. describes a solid guidewire with a flexible tip and a lubricous coating.

Claim 18 depends from independent Claim 15. As the above-discussed shortcomings of Gambale et al. relative to the invention of Claim 15 are not overcome by the proposed combination of Schwartz et al. with Gambale et al., Claim 18 is believed to be patentable over the combination of Gambale et al. and Schwartz et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103(a) rejection of Claim 18 is overcome and should be withdrawn.

The rejection of Claim 19 under 35 U.S.C. § 103(a) as being unpatentable over Gambale et al. in view of Tsukada et al. (U.S. Patent No. 6,455,783) is respectfully traversed.

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Gambale et al. is described above. Tsukada et al. describes a method of applying a mask and removing the mask.

Claim 19 depends from independent Claim 15. As the above-discussed shortcomings of Gambale et al. relative to the invention of Claim 15 are not overcome by the proposed combination of Tsukada et al. with Gambale et al., Claim 19 is believed to be patentable over the combination of Gambale et al. and Tsukada et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103(a) rejection of Claim 19 is overcome and should be withdrawn.

The rejection of Claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Gambale et al. in view of Corso, Jr. (U.S. Patent No. 5,406,960) is respectfully traversed.

Gambale et al. is described above. Corso, Jr. describes a guidewire including a radiopaque core wire and a spring of radiopaque material surrounding the distal tip portion of the core wire.

Claim 20 has been amended to recite a "method for manufacturing a guidewire suitable for measuring features within a vessel, the method comprising: providing a core wire having a proximal section and a distal section; coating at least a portion of the distal section with a mask; exposing the core wire beneath the mask at a plurality of predetermined locations; forming indentations at the predetermined locations; depositing a radiopaque material within the indentations at the predetermined locations; and removing the mask to provide a substantially smooth outer surface of the distal section."

Gambale et al. in view of Corso, Jr. does not describe nor suggest providing a substantially smooth outer surface of the distal section, as required by Applicants' claimed invention. Rather, Gambale et al. describes a guidewire having a shaft and an outer helical coil attached to the distal region of the shaft and extending distally beyond the distal end of the shaft. The deficiencies of Gambale et al. are not overcome by Corso, Jr. As discussed above, Corso, Jr. describes a guidewire including a radiopaque core wire and a spring of radiopaque material surrounding the distal tip portion of the core wire.

For the reasons set forth above, Applicants respectfully submit that Claim 20 is patentable over Gambale et al. in view of Corso, Jr.

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For at least the reasons set forth above, Applicants respectfully request that the Section 103(a) rejection of Claim 20 is overcome and should be withdrawn.

The rejection of Claims 15-18 under 35 U.S.C. § 103(a) as being unpatentable over Frechette et al. (U.S. Patent No. 5,144,959) in view of Gambale et al. is respectfully traversed.

Frechette et al. describes a guidewire including a core wire forming a compound tapered distal tip and a flexible spring or coil surrounding the core wire at the distal tip.

Gambale et al. is described above.

Claim 15 has been amended to recite a "method for manufacturing a guidewire suitable for measuring features within a vessel, the method comprising: providing a core wire having a proximal section and a distal section, the distal section at least partially defining a distal outer surface of the guidewire; ... and removing the mask to provide a plurality of equally spaced radiopaque markers on the distal section."

Frechette et al. in view of Gambale et al. does not describe nor suggest providing a core wire having a proximal section and a distal section, the distal section at least partially defining a distal outer surface of the guidewire, as required by Applicants' claimed invention. Rather, Frechette et al. describes a compound tapered distal tip and a flexible spring or coil surrounding the core wire at the distal tip. Further, Frechette et al. does not describe or suggest a plurality of equally spaced radiopaque markers on the distal section of the core wire, as required by Applicants' claimed invention.

Gambale et al. does not overcome the deficiencies of Frechette et al. As discussed above, Gambale et al. does not describe or suggest providing a core wire having a proximal section and a distal section, the distal section at least partially defining a distal outer surface of the guidewire, or a plurality of equally spaced radiopaque markers on the distal section of the core wire, as required by Applicants' claimed invention.

For the reasons set forth above, Applicants respectfully submit that Claim 15 is patentable over Frechette et al. in view of Gambale et al.

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Claims 16, 17, and 18 depend from independent Claim 15. When the recitations of Claims 16, 17, and 18 are considered in combination with the recitations of Claim 15, Applicants submit that dependent Claims 16, 17, and 18 likewise are patentable over Frechette et al. in view of Gambale et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103(a) rejection of Claims 15-18 is overcome and should be withdrawn.

The rejection of Claims 15-18 under 35 U.S.C. § 103(a) as being unpatentable over Daigle et al. (U.S. Patent No. 5,253,653) in view of Callol et al. (U.S. Patent No. 6,174,329) is respectfully traversed.

Daigle et al. describes a guidewire having a core wire and a coil joined to a jacket and surrounding the distal tip of the core wire.

Callol et al. describes a stent that is radiolucent and at least partially coated with a radiopaque layer.

Claim 15 has been amended to recite a "method for manufacturing a guidewire suitable for measuring features within a vessel, the method comprising: providing a core wire having a proximal section and a distal section, the distal section at least partially defining a distal outer surface of the guidewire; ... and removing the mask to provide a plurality of equally spaced radiopaque markers on the distal section."

Daigle et al. does not describe or suggest providing a core wire having a proximal section and a distal section, the distal section at least partially defining a distal outer surface of the guidewire, as required by Applicants' claimed invention. Callol et al. does not overcome the deficiencies of Daigle et al. Rather, Callol et al. describes a stent that is radiolucent and at least partially coated with a radiopaque layer. Callol et al. does not describe or suggest providing a core wire having a proximal section and a distal section, the distal section at least partially defining a distal outer surface of the guidewire, or a plurality of equally spaced radiopaque markers on the distal section of the core wire, as required by Applicants' claimed invention.

For the reasons set forth above, Applicants respectfully submit that Claim 15 is patentable over Daigle et al. in view of Callol et al.

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Claims 16, 17, and 18 depend from independent Claim 15. When the recitations of Claims 16, 17, and 18 are considered in combination with the recitations of Claim 15, Applicants submit that dependent Claims 16, 17, and 18 likewise are patentable over Daigle et al. in view of Callol et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103(a) rejection of Claims 15-18 is overcome and should be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

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